# NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

## CHANNEL VEGETATION

(acre)

#### **CODE 322**

### **DEFINITION**

Establishing and maintaining adequate plants on channel banks, berms, spoil, and associated areas.

### **PURPOSE**

To stabilize channel banks, streambanks and adjacent areas and reduce erosion and sedimentation. To improve water quality, or enhance fish and wildlife habitat.

### SCOPE

This standard applies to the vegetation of open channels, streams, or ditches. It applies to Floodwater Diversions (400), Floodways (404), Open Channels (582), Stream Channel Stabilization (584), Streambank Protection (580), and Surface Drainage, Main Or Lateral (607-B).

# CONDITIONS WHERE PRACTICE APPLIES

On channel banks, streambanks, berms, spoil, and associated areas requiring permanent protective vegetative cover.

### **CRITERIA**

Recommended grass, legumes, shrubs or trees will be adaptable to the site conditions, suitable for the planned purposes and accomplish the landowners objectives. Selection of suitable trees or shrubs will be made from Table 1 or 2 of the Hedgerow

Planting (422) standard. Trees and shrubs will be established according to Tree/Shrub Establishment (612) and Forest Site Preparation (490) conservation practice standards.

Selection and establishment of adaptable grasses, legumes will be based upon the Critical Area Planting (342) standard.

Temporary vegetative cover will be established when permanent vegetation will not be planted within 15 days after site preparation.

When planting into an existing vegetative stand herbicides or mechanical disturbance may be used to suppress the current vegetation.

Establishment of woody vegetation using willow cuttings, and other woody shrubs and trees that root from the stem (fascines, stakes, brush mats, brush layer cut) may be used as a single practice or in combination with other structural features. See reference titled "Chesapeake Bay Riparian Handbook" or National Engineering Handbook, Part 653 – Stream Corridor Restoration, or NRCS Engineering Field Handbook, Chapters 16 & 18 for structure descriptions.

Slopes shall be 2:1 or flatter where vegetation is being established.

Mulching (484) or Cover Crop (340) standard is to be used to minimize sheet and rill erosion during establishment of vegetation.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

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Control access to streambank or channel, as needed, by Use Exclusion (472) standard to protect slopes and vegetation from damage.

### PLANNING CONSIDERATIONS

Evaluate slopes and soil material, time of year for proper establishment of vegetation, visual aspects, fish and wildlife, and special needs when site preparation is done from one side. Other considerations include:

- 1. Provisions for safety and protection of human life and property in all aspects of designs, application, and maintenance;
- 2. Methods by which endangered and threatened plants will be identified and protected;
- 3. Requirements for overseeding or planting woody or herbaceous vegetation on the unexcavated side when construction is done from one side:
- 4. Identification of established desirable trees and other vegetation and means for their protection; and
- For extensive streambank erosion consider using the "Natural Stream Channel Systems Approach".

### PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared for specific site conditions. The following specifications will be documented in the conservation plan narrative and/or contract narrative.

- Purpose of planting/seeding
- Field location/plan view
- Acres to be planted
- Soil amendments (if needed)
- Site preparation methods (if needed)
- Species to be used

- -Plant Guide/Plant Sheets
- Seeding mixture/rate (grasses/legumes only)
- Stock size and spacing (trees/shrubs only)
- Planting method(s)
- Planting dates
- Protection methods
- Operation and maintenance plan

#### Maintenance. Provide for:

- 1. Inspection and evaluation of channel vegetation to determine maintenance needs after high flow events and annually.
- 2. Management of vegetation growth, as applicable, by mowing, approved chemicals, or other means to maintain the desired cover.
- 3. Reseeding or replanting, along with the use of fertilizers and/or soil amendments if vegetative cover is less than 70%.
- 4. Repair of appurtenances and fences.

### **REFERENCES**

Palone, R.S. and A.H. Todd (editors) 1997. Chesapeake Bay Riparian Handbook: A Guide for Establishing and Maintaining Riparian Forest Buffers. –Chapter 8. USDA Forest Service. Randor, PA.

http://www.chesapeakebay.net/pubs/subcommittee/nsc/forest/handbook.htm

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